REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Final Office Action dated November 18, 2003 has been received and its contents carefully reviewed.

In the Office Action, the Examiner rejected claims 1, 3, 16-18, 21, and 23 under 35 U.S.C. §102(b) as being anticipated by Watanabe et al. (U.S. Patent No. 5,479,284); and objected to claims 2, 4, 19, 20, and 22 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The rejection of these claims is traversed and reconsideration of the claims is respectfully requested in view of the following remarks.

Preliminarily, it is noted that the "Disposition of Claims" section in the Office Action Summary of the outstanding Office Action states that claims 1-4 and 16-23 are currently rejected and that claims 4-23 are withdrawn from consideration. Contrary to the aforementioned "Disposition of the Claims," Applicants respectfully submit claims 5-15 and 24-27 are pending but currently withdrawn from consideration, claims 1, 3, 16-18, 21, and 23 currently stand as being rejected, and claims 2, 4, 19, 20, 22 currently stand as being objected to.

Applicants appreciate the indication of allowable subject matter in claims 2, 4, 19, 20, and 22, which were objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

The rejection of claims 1, 3, 16-18, 21, and 23 under 35 U.S.C. §102(b) as being anticipated by Watanabe et al. is respectfully traversed and reconsideration is respectfully requested.

Claim 1 is allowable over Watanabe et al. in that claim 1 recites a combination of elements including, for example, "maintaining a pressure in a liquid crystal injection chamber at a first pressure, and at the same time maintaining a liquid crystal tray contacted to a liquid crystal panel and an injection hole thereof at a first temperature, to inject a liquid crystal from said liquid crystal tray to said liquid crystal panel...." Watanabe et al. fails to teach, either inherently or expressly, at least these features of the claimed invention. Accordingly, Applicants respectfully submit that claim 3, which depends from claim 1 is also allowable over Watanabe et al.

In rejecting claim 1, the Examiner cites Figure 11 and column 7, line 35 – column 8, line 29 of Watanabe et al. as allegedly teaching "maintaining a pressure in a liquid crystal injection chamber at a first pressure, and at the same time maintaining a liquid crystal tray contacted to a liquid crystal panel and an injection hole thereof at a first temperature, to inject a liquid crystal from said liquid crystal tray to said liquid crystal panel; increasing the pressure in said chamber to a second pressure higher than said first pressure...."

It is respectfully submitted, however, that, at column 7, lines 36-43, Watanabe et al. states "a panel 101 preliminarily injected with a liquid crystal material but retaining some void... was fixed... so that the injection port directed downward contacted the liquid crystal material on the tray. The panel 101 in this state was subjected to heating of the liquid crystal material and pressurization from the injection port toward the inside of the panel according to the program shown in FIG. 11." Watanabe et al. describes the program shown in Figure 11,

at column 8, lines 1-7, stating "[f]irst, the interior of the chamber 103 and the plate heater 104 were heated... Then, the pressure within the chamber was increased so as to apply a pressure from the injection port toward the panel inside, thereby promoting the filling of the void in the panel with the liquid crystal material." Upon inspecting Figure 11 of Watanabe et al., it is readily apparent that that the liquid crystal material fills the void in panel 101, preliminarily injected with liquid crystal material and containing the void, upon increasing the pressure (113) from the "NORMAL PRESS." to the elevated pressure value "P" after the temperature of the chamber 111 and of the plate 112 increased as opposed the present invention wherein liquid crystal material is injected into the panel at the first pressure before pressure within the chamber to a second pressure. Accordingly, Applicants respectfully submit Watanabe et al. fails to teach at least the aforementioned combination of elements required by claim 1. To reiterate, claim 1 recites, among other elements "maintaining a pressure in a liquid crystal injection chamber at a first pressure, and at the same time maintaining a liquid crystal tray contacted to a liquid crystal panel and an injection hole thereof at a first temperature, to inject a liquid crystal from said liquid crystal tray to said liquid crystal panel...."

In the "Response to Arguments" section of the outstanding Office Action, the Examiner refers to an attached marked-up copy of Figure 11 of Watanabe et al. illustrating what the Examiner interprets the claimed "first pressure" and "second pressure" to be read upon as the "NORMAL PRESS." and "P" pressure values of Watanabe et al., respectively. Applicants respectfully submit, however, that while Figure 11 of Watanabe et al. (and the related text cited above) can be reasonably understood to illustrate maintaining a chamber pressure at a first pressure (i.e., "NORMAL PRESS.") and that a panel 101, preliminarily injected with liquid crystal material but retaining a void, may be exposed to such a first

pressure, Watanabe et al. is completely silent as to any teaching wherein exposure of the panel 101 to the "NORMAL PRESS." pressure causes, at least in part, liquid crystal material to be injected to the panel, as required by claim 1. Moreover, claim 1 further requires that the temperature of a liquid crystal tray be maintained at a first temperature while the first pressure is maintained. A close inspection of Figure 11 shows that the temperature of the tray continually increases while the first pressure is maintained (see Watanabe et al., Figure 11, reference numeral 112 "PLATE TEMP"). For at least this reason, Applicants respectfully submit Watanabe et al. actually teaches away from the invention set forth in claim 1.

Claim 16 is allowable over Watanabe et al. in that claim 16 recites a combination of elements including, for example, "at a first pressure and at a first temperature, injecting liquid crystal material from said liquid crystal tray, through said injection hole, into said liquid crystal panel; increasing the pressure in said liquid crystal injection chamber from said first pressure to a second pressure...." Watanabe et al. fails to teach, either inherently or expressly, at least these features of the claimed invention. Accordingly, Applicants respectfully submit claims 17, 18, 21, and 23, which depend from claim 16 are also allowable over Watanabe et al. Moreover, Applicants respectfully submit claim 16 is a generic claim with respect to the inventions defined by claims 24-27. Accordingly, Applicants respectfully submit claims 24-27 are allowable over Watanabe et al. by virtue of their dependence from claim 16.

In rejecting claim 16, the Examiner cites Figure 11 and column 7, line 35 – column 8, line 29 of Watanabe et al. as allegedly teaching "at a first pressure and temperature for filling... the liquid crystal and remove the void (... col. 3, lines 24-28), injecting liquid crystal material from said liquid crystal tray, through said injection hole, into said liquid crystal

panel; increasing the pressure in said liquid crystal injection chamber from a first pressure to a second pressure...."

Based on the discussion above with respect to Figure 11 of Watanabe et al., it is respectfully submitted that liquid crystal material is not injected into the panel 101 of Watanabe et al. (i.e., the void is not removed by the injection of liquid crystal material) until the pressure within the injection chamber of Watanabe et al. is maintained at the "second pressure" as designated in the Examiner's aforementioned attached marked-up copy of Figure 11 (see also Watanabe et al., Figure 11, reference numeral 113 "PRESSURE" at value "P"; column 8, lines 1-7). Accordingly, Applicants respectfully submit Watanabe et al. is silent as to any teaching wherein the pressure is increased from the pressure at which liquid crystal material is injected, as presently required by claim 13. A close inspection of Figure 11 shows that the chamber pressure is maintained at the "second pressure" and then decreases. For at least this reason, Applicants respectfully submit Watanabe et al. actually teaches away from the invention set forth in claim 13.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. If the Examiner deems that a telephone conversation would further the prosecution of this application, the Examiner is invited to call the undersigned at (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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